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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,794	03/26/2004	Takayuki Kobayashi	071469-0103	7137

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FOLEY AND LARDNER LLP
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EXAMINER

WOLLSCHLAGER, JEFFREY MICHAEL

ART UNIT	PAPER NUMBER
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1791

MAIL DATE	DELIVERY MODE
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10/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/809,794

Applicant(s)

KOBAYASHI, TAKAYUKI

Examiner

Jeff Wollschlager

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1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-11 and 18-20 is/are pending in the application.
- 4a) Of the above claim(s) 13-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-11 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

It is noted for the record that Examiner Wollschlager has assumed responsibility for this application from Examiner Eashoo.

Election/Restrictions

Newly submitted claims 13-17 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The method of claims 1 and 13 are mutually exclusive embodiments (Instant disclosure US 2004/0247731, Figure 2 and Figure 8; paragraph [0042]).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 13-17 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Response to Amendment

Applicant's amendment to the claims filed June 25, 2007 has been entered. Claims 1-7 and 12 have been canceled. Claims 8 and 10 are currently amended. Claims 18-20 are new. Claims 13-17 have been withdrawn from further consideration.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 18 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that

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the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 18 requires that the movement of the valve mechanism rod be restricted within the width of the second passage. This limitation does not appear to be supported by the original disclosure. The examiner notes that element 119a extends into the die body as well as the second passage and is actuated externally.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim recites the thermoplastic elastomer is "TPO" or "SBC". These abbreviations are not defined in the specification and it is unclear as to what material they positively limit the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-11 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koganezawa et al. (US 5,489,409) in view of either of JP 04-338523 or Arima (US 5,486,325).

Regarding claim 8: Koganezawa et al. teaches a method of extrusion, comprising: a molding system including a die having a opening with both variable and invariable portions (Fig. 6-17); a gear pump (9:14-25); and conducting first and second control sequences to control the

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shape of the variable die portion and adjusting the gear pump in synchronism with the change in shape (Fig. 1 and 8:30-9:25). Intrinsically, for operability of the gear pump, the gear pump is located between the die and an extruder. Koganezawa et al. do not teach a branch part arranged as claimed or opening and closing a valve mechanism arranged in the second passage.

However each of JP '523 (Figure 10 and Figure 12; English Abstract) and Arima (Abstract; col. 2, lines 14-25; col. 4, lines 35-65; col. 5, lines 12-20) disclose analogous extrusion molding methods wherein a branch part arranged as claimed and opening and closing a valve arranged in the second passage.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the teaching of Koganezawa et al. and to have employed a branch part arranged as claimed and opening and closing a valve arranged in the second passage as is taught by either of JP '523 or Arima for the purpose as taught by Arima of adding bridged sections to the automobile window/door molding of Koganezawa et al at different lengths along the product or for the purpose as taught by JP '523 of providing an additional and efficient means of handling excess resin material.

The examiner notes that the instant claims do not exclude methods which employ, in total, more than 2 passages. Accordingly, for example, the channel in JP '523 leading to the valve (39) is reasonably understood to be the second passage, the channel leading to (54) is reasonably understood to be the first passage and the passage "A" is reasonably understood to be a third passage.

Regarding claim 9: Koganezawa et al. teaches changing the extruder/screw speed (6:50-55).

Regarding claim 10: It is intrinsic of Koganezawa et al. that the lag time of the extruder

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speed and flow would be accounted for during the control sequence in order for the process of Koganezawa et al. to function as desired (ie. increased accuracy of product shape).

Regarding claim 11: Koganezawa et al. teaches use of a pressure sensor as part of the control system (9:20-25).

As to claim 18, JP '523 shows the valve mechanism, reasonably understood to be a rod, within the width of the second passage (Figure 10).

As to claims 19 and 20, Koganezawa et al. disclose thermoplastic elastomeric materials such as styrene and butadiene copolymers (col. 10, lines 15-34).

Response to Arguments

Applicant's arguments filed June 25, 2007 have been considered but are moot in view of the new grounds of rejection necessitated by amendment.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

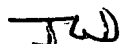
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Wollschlager whose telephone number is 571-272-8937. The examiner can normally be reached on Monday - Thursday 7:00 - 4:45, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jeff Wollschlager
Examiner
Art Unit 1791

October 9, 2007



CHRISTINA JOHNSON
SUPERVISORY PATENT EXAMINER